

AK

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/626,491	JAUSSI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Terry L. Englund	2816	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amdt/Dwgs/TD (Feb 22, 2005) and IDS (Feb 23, 2005).
2. ☒ The allowed claim(s) is/are 14-42 (now renumbered as 1-29, respectively for printing purposes).
3. ☒ The drawings filed on 22 February 2005 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| <ol style="list-style-type: none"><li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li><li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li><li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date <u>02232005</u></li><li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li></ol> | <ol style="list-style-type: none"><li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li><li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li><li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li><li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li><li>9. <input type="checkbox"/> Other _____</li></ol> |
|---|---|

  
**TUAN T. LAM**  
**PRIMARY EXAMINER**

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to the applicants, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 29, line 10: added --the-- prior to "present";

line 11: added --the-- prior to "present";

Claim 33, line 11: added --the-- prior to "present";

line 12: added --the-- prior to "present";

Claim 38, line 9: added --the-- prior to "present";

line 10: added --the-- prior to "present";

Claim 40, line 12: added --the-- prior to "present";

line 13: added --the-- prior to "present";

Claim 42, line 7: added --the-- prior to "present"; and

line 8: added --the-- prior to "present."

The changes above address/correct minor oversights that do not affect the scope of the claims, wherein each of the claims above had the term --the-- added prior to the phrase "present and previous" since the present/previous voltage signals had been previously recited within each claim. Therefore, the above changes relate the later recited reference of the present/previous signals back to their corresponding previous recitation.

### **RESPONSE TO TD/AMENDMENT/DRAWINGS**

The amendment, drawings, and terminal disclaimer submitted on Feb 22, 2005 were reviewed and considered with the following results:

The amendment's comments overcame the objection to the declaration. Since this is a continuation, a newly executed oath/declaration is not required (e.g. see 37 C.F.R. 1.63(d)(1)). Therefore, that objection has been withdrawn.

The replacement sheets of drawings overcame the various objections to the drawings described in the previous Office Action, which have now been withdrawn.

The amended disclosure overcame the objections to the title and disclosure, and these objections have also been withdrawn.

The cancellation of claims 1-13 rendered their objections and rejections moot.

Amended claims 16, 19-23, and 25 overcame the objections of claims 16, 19-23, and 25-28. Therefore, those claim objections have been withdrawn. Although several minor concerns were noted in some of the newly added claims, these were all addressed/corrected by the Examiner's Amendment described above.

The amended claims also overcame the rejections of claims 14-28 under 35 U.S.C. 112, which have now been withdrawn.

The terminal disclaimer (TD) was approved, overcoming the double patenting rejections of claims 14-28 described in the previous Office Action. The TD also prevented any double patenting rejections to be made with respect to the amendment's newly added claims 29-42.

Therefore, there is no known objection or rejection remaining within the present application.

### REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

None of the prior art references reviewed and considered shows/discloses the filtering method, communication system, and/or filter circuit as recited within independent claims 14, 25, 29, 33, 38, 40, and 42. More specifically, none of the references clearly shows/discloses at least first/second differential pairs biased by their respective first/second signals, wherein first/second output nodes correspond to transistors receiving their associated signal with the understanding that the signals comprise present and previous type signals (e.g. one signal is received prior to another signal), the first/second output terminals (or nodes), and the method (or circuit) also includes: 1) the first/second differential inputs being weighted as recited within claim 14, upon which claims 15-24 depend; 2) the filter receiving the first/second differential inputs from the same-and-hold circuit as recited within claim 25, upon which claims 26-28 depend; 3) the tail current differential relates to a difference in channel widths as recited within claim 29, upon which claims 30-33 depend; 4) the first/second offset-inducing differential pairs as recited within claim 33, upon which claims 34-37 depend; 5) the differential pair transistors are p-channel MOSFETs as recited within claim 38, upon which claim 39 depends; 6) the third differential transistor pair biased by a subsequent first voltage signal as recited within claim 40, upon which claim 41 depends; and 7) the transistors biased by the present/previous first voltage signals have a first output node, and the transistors biased by the present/previous second voltage signals have a second output node, as recited within claim 42. [Note: Although various prior art references show/disclose at least first/second differential pairs receiving their respective input signals, the signals are typically: 1) the same (i.e. the differential pairs both receive identical

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signals); or 2) independent (i.e. one set of signals does not correspond to the other set of signals). Also, this examiner does not consider a signal that is merely a delayed version of another signal as a present signal with respect to the original signal received. For example, in the present application, it is understood that a sample-and-hold circuit receives a (present) signal, and also holds a value with respect to a previously (or prior) received signal. These are the types of signals that the present and previous types of signals within the claims refer to.] Since there is no strong motivation to modify or combine any prior art reference(s) to ensure present/previous type signals are applied to their corresponding differential pair, as well as the other recited limitation(s) described above with respect to claims 14, 25, 29, 33, 38, 40, and 42, all the active claims (i.e. 14-42) are deemed patentably distinct over the prior art of record.

Claims 14-42 are allowed, and have been renumbered as 1-29, respectively for printing purposes. The renumbering takes into account the cancellation of claims 1-13.

### **PRIOR ART**

The prior art references cited on the IDS submitted Feb 23, 2005 were reviewed and considered. All of these references were cited in the parent application 10/041,677, which was issued as U.S. Patent 6,624,688 B2 on Sep 23, 2003. The three references that are lined through on the Feb 23<sup>rd</sup> IDS were previously considered, and had been cited on the examiner's PTO-892 sent out with the previous Office Action. Those three references were deemed to be the most relevant references with respect to the claimed limitations, wherein none of the other references clearly shows/discloses either the understood previous and present type signals, or the at least two differential pairs, as recited within the independent claims.

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Any comments considered necessary by the applicants must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication, or previous communications, from the examiner should be directed to Terry L. Englund whose telephone number is (571) 272-1743. The examiner can normally be reached Monday-Friday from 7 AM to 3 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Callahan, can be reached on (571) 272-1740.

The new central official fax number is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1562.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Terry L. Englund

12 May 2005

  
TUAN T. LAM  
PRIMARY EXAMINER

Applicant : James E. Jaussi et al.  
Serial No. : 10/626,491  
Filed : July 24, 2003  
Page : 13 of 17

Attorney's Docket No.: 10559-554002 / P12574C

Approved  
5.11.05  
TLE

AMENDMENTS TO THE DRAWINGS

The attached replacement sheets (6 pages) of drawings include changes to Figs. 1-5 and replace the originally-filed set of 6 pages.

In Figs. 1-5, the Applicants have added labels to identify  $V_{out+}$  and  $V_{out-}$ .

In Fig. 2, the Applicants have shown the configuration described in the specification by swapping the inputs labeled  $V_{N-1+}$  and  $V_{N-1-}$ .

Applicants request that the Examiner approve and enter the attached drawings (Figs. 1-6) as formal drawings.

Attachments following the last page of this Amendment:

Replacement Sheets (6 pages)

REPLACEMENT SHEET  
 Page 1 of 6  
 FILTERING VARIABLE OFFSET AMPLIFIER  
 James E. Jaussi et al.  
 10/626,491  
 10559-554002

Approved  
 5.11.05  
 TLE

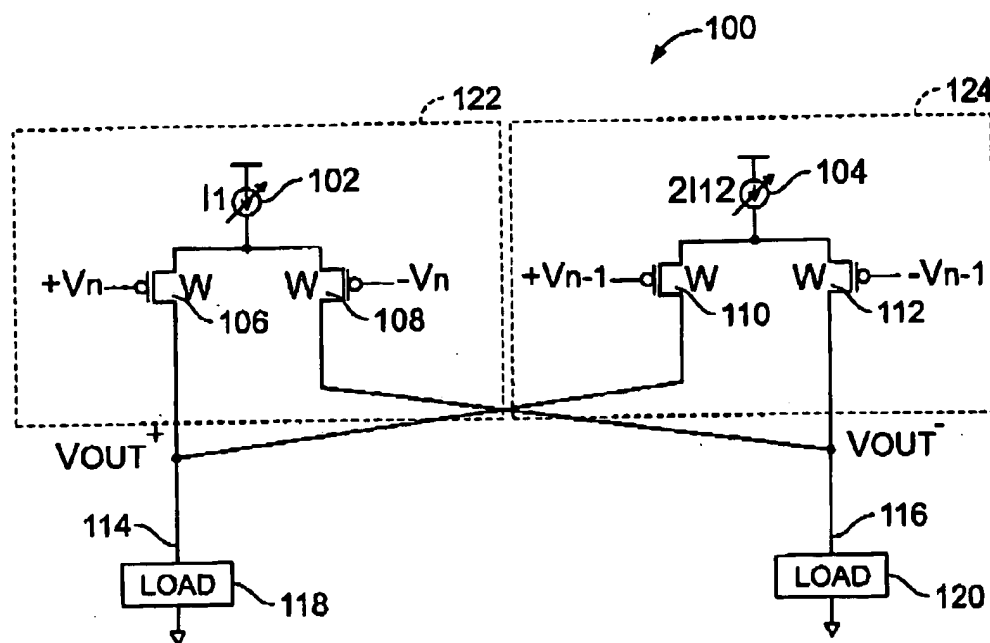


FIG. 1



REPLACEMENT SHEET  
 Page 2 of 6  
 FILTERING VARIABLE OFFSET AMPLIFIER  
 James E. Joussi et al.  
 10/626,491  
 10559-554002

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 5.11.05  
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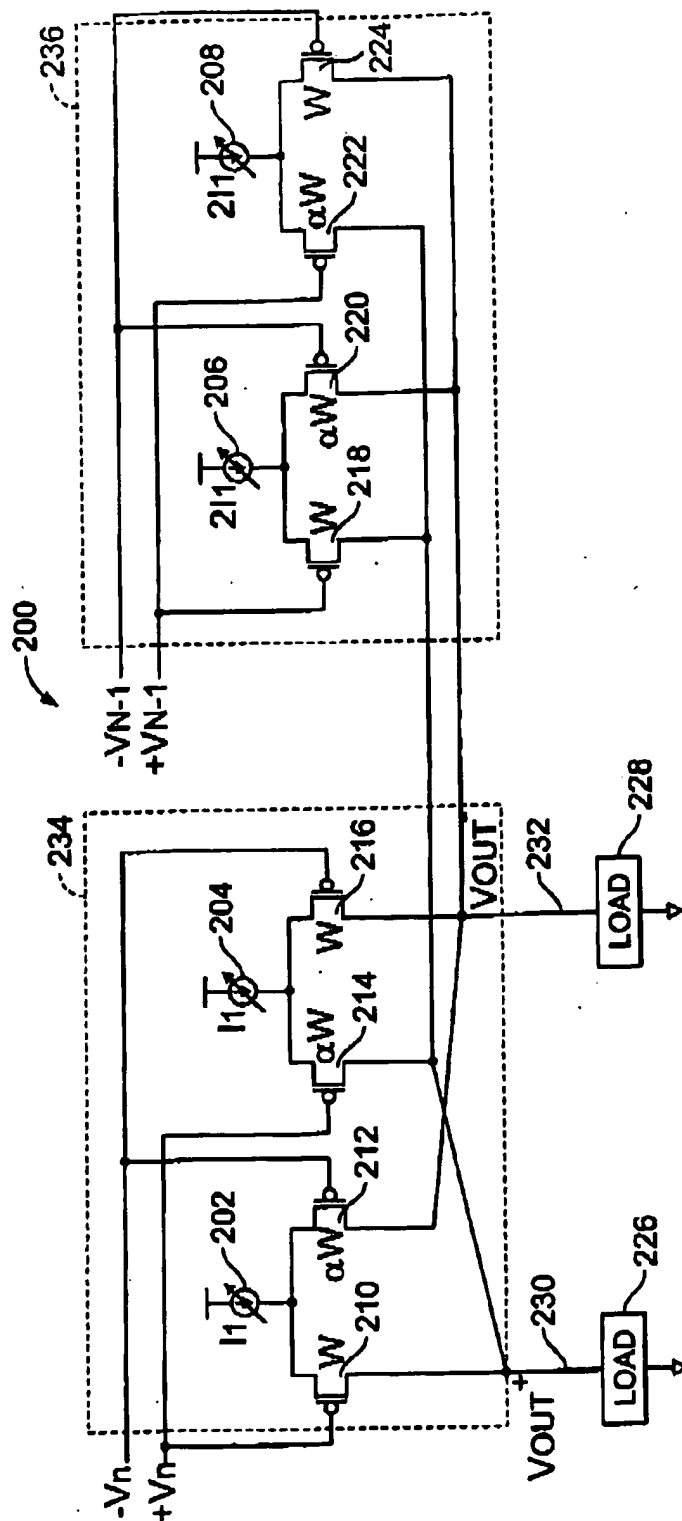


FIG. 2

REPLACEMENT SHEET  
 Page 3 of 6  
 FILTERING VARIABLE OFFSET AMPLIFIER  
 James E. Jaussi et al.  
 10/626,491  
 10559-554002

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 5.11.05  
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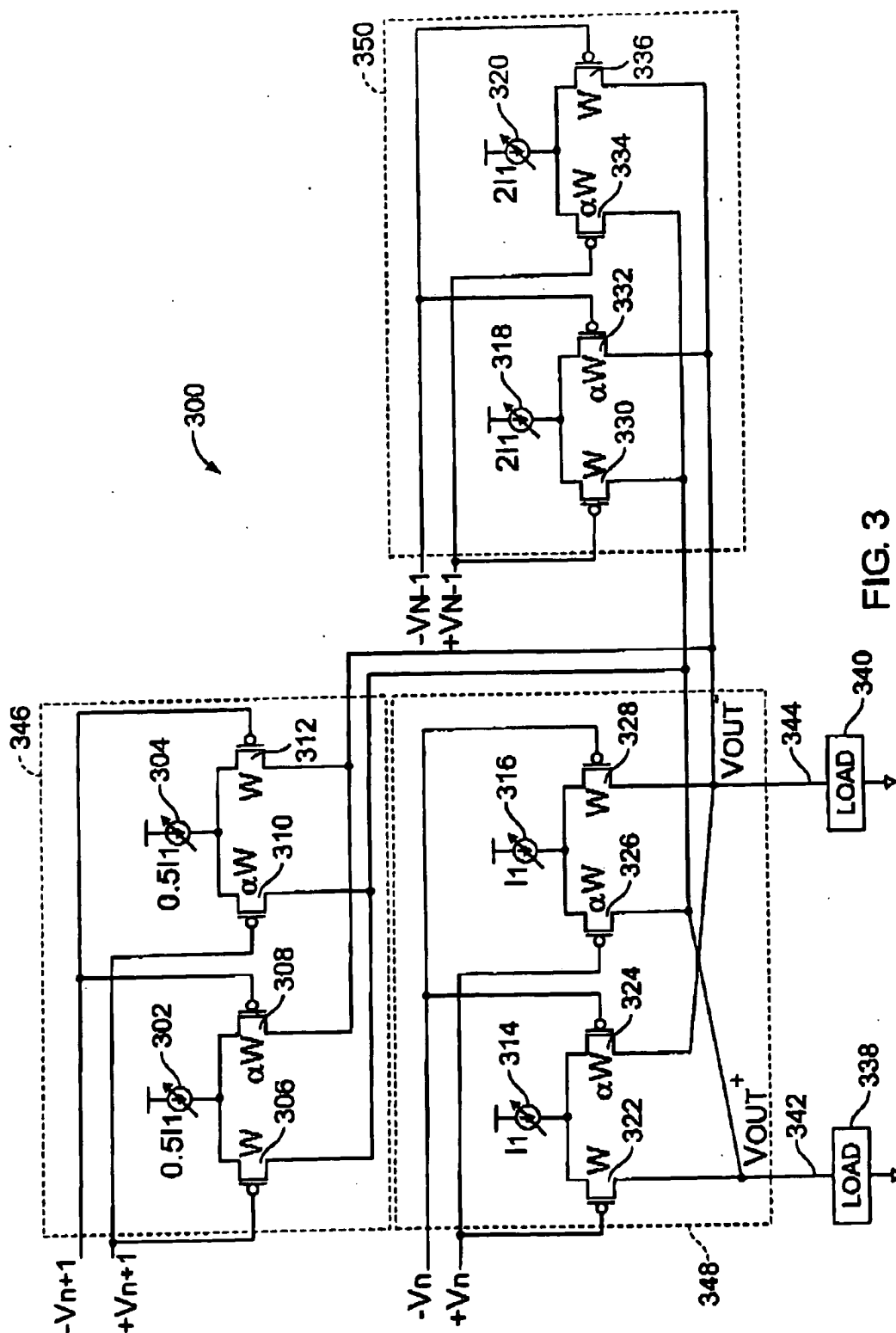


FIG. 3

REPLACEMENT SHEET  
 Page 4 of 6  
 FILTERING VARIABLE OFFSET AMPLIFIER  
 James E. Jaussi et al.  
 10/626,491  
 10539-554002

Approved-2  
 5.11.05  
 TLE

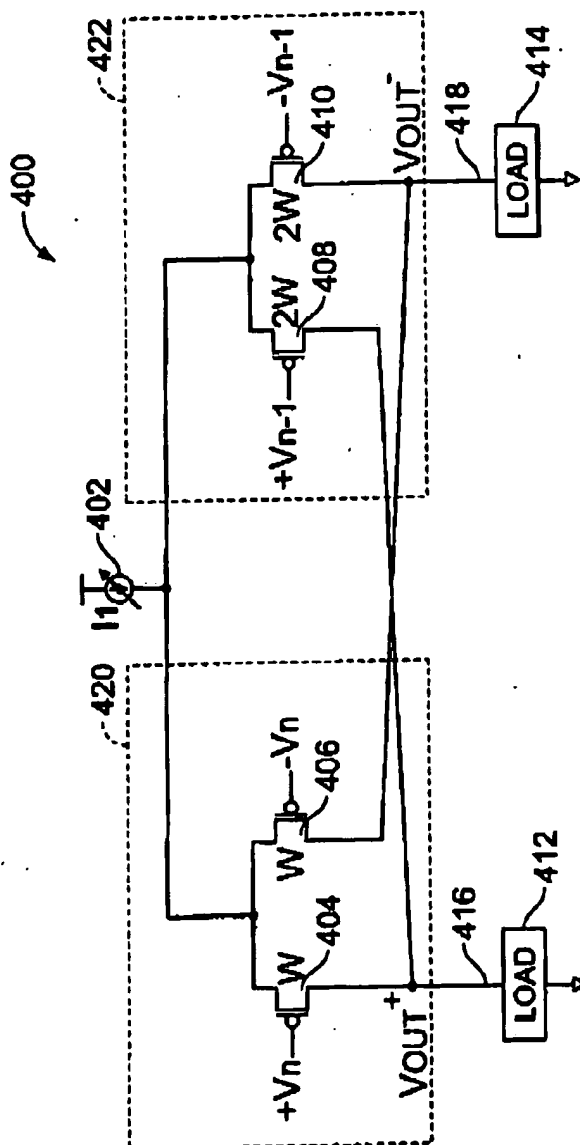


FIG. 4

REPLACEMENT SHEET  
 Page 5 of 6  
 FILTERING VARIABLE OFFSET AMPLIFIER  
 James E. Jausri et al.  
 10/626,491  
 10559-554002

Approved  
 5.11.05  
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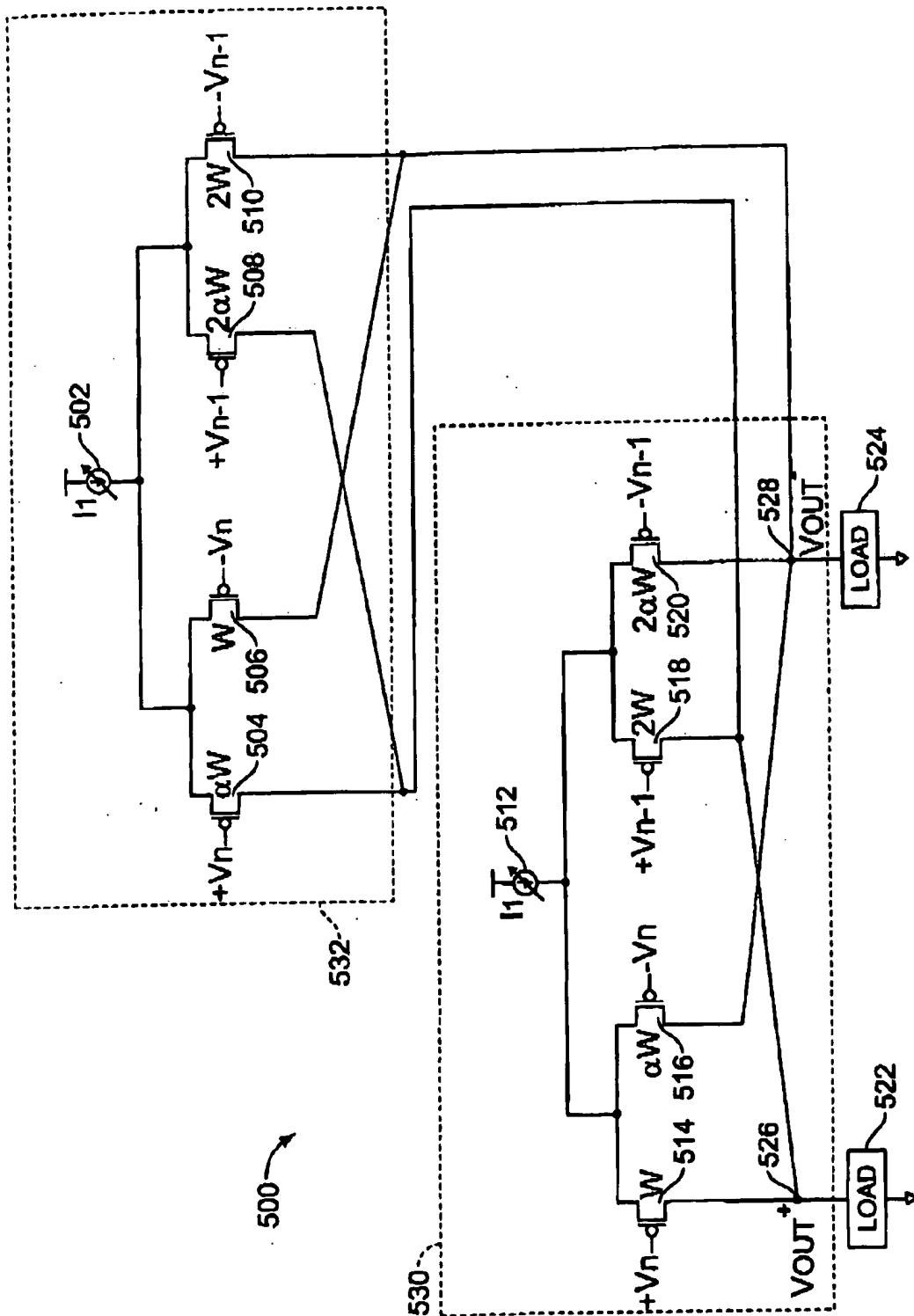


FIG. 5

REPLACEMENT SHEET  
Page 6 of 6  
FILTERING VARIABLE OFFSET AMPLIFIER  
James E. Jaussi et al.  
10/626,491  
10559-554002

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5.11.05  
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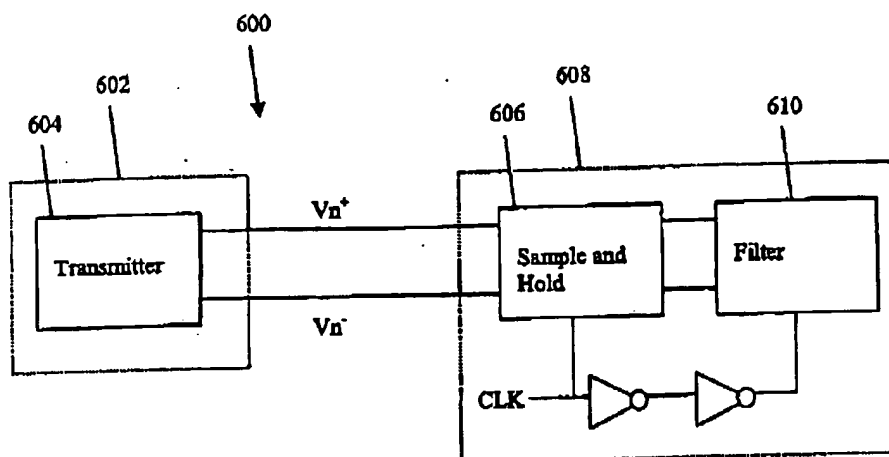


FIG. 6